Special Issue

Purinergic Signaling in Health and Disease

Message from the Guest Editor

Extracellular adenosine, adenine nucleotides and uracil nucleotides play important roles in the control of the function of cells, organs and organ systems. Adenosine activates four human G-protein-coupled receptors. P2Y receptors are G-protein-coupled receptors for adenine nucleotides and uracil nucleotides. There are eight human subtypes. P2X receptors are ligand-gated receptors for adenine nucleotides with a trimeric protein structure. Seven human P2X subtypes build these trimers. Agonists and antagonists have been developed for use in pharmacotherapy. Adenosine and analogues are used for the diagnosis and therapy of cardiovascular diseases. The P2Y2 receptor agonist diquafosol is used for the treatment of dry-eye disease. Several P2Y12 receptor antagonists inhibit platelet aggregation in the prevention and therapy of cardiovascular events such as myocardial infarction.

Guest Editor

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Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

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